Claim Amendments

Kindly amend the claims in the application as follows:

1. (Previously presented): A power supply circuit, the circuit comprising:

an active power factor correction circuit, the active power factor correction circuit having a controller; and

an inrush current control circuit, the inrush control circuit comprising at least one switch having a control element coupled to a control output of the controller.

2. (Previously presented): A power supply circuit as in claim 1 wherein the switch comprises an IGBT.

3. (Original): A power supply circuit as in claim 1 wherein the controller comprises as UC3854 integrated circuit.

4. (Previously presented): A power supply circuit as in claim 1 wherein the inrush current control circuit further comprises at least one gate driver connected to the controller.

5. (Original): A power supply circuit as in claim 4 wherein the at least one gate driver comprises a charge pump circuit.

6. (Original): A power supply circuit as in claim 4 wherein the at least one gate driver comprises a power amplifier.

7. (Original): A power supply circuit as in claim 1 wherein the inrush current control circuit further comprises at least one passive current limiting device.

8. (Original): A power supply circuit as in claim 7 wherein the at least one passive current limiting device comprises a positive temperature coefficient (PTC) resistor.

9. (Original): A method for controlling inrush current in a power factor correction control circuit, the method comprising the steps of:

determining if an inrush current condition exists;

based upon a determination that an inrush current condition does exist then passively controlling inrush current with a passive device for a predetermined amount of time;

generating a power factor control signal; and

implementing the power factor control signal to actively control the inrush current, wherein the step of actively controlling the inrush current shunts output current around the passive device and through an active device.

10. (Original): A method as in claim 9 wherein the step of passively controlling inrush current further comprises the step of passing current through a passive device, the passive device resistance having a positive temperature coefficient (PTC).

11. (Previously presented): A method as in claim 9 wherein the step of generating the power factor control signal further comprises the steps of:

charging at least one power capacitor to a predetermined voltage level; and

enabling at least one integrated circuit associated with the at least one capacitor.

12. (Canceled)

13. (Previously presented): A method as in claim 11 wherein the step of enabling further comprises the steps of:

determining an input current;

comparing the input current with a predetermined current level; and

disabling the integrated circuit if the input current exceeds the predetermined level.

14. (Original): A method as in claim 9 wherein the step of shunting current around the passive device and through the active device further comprises the step of substantially shunting the output current through an insulated gate bipolar transistor (IGBT).

15. (Currently amended): An active current inrush limiting circuit for controlling surge current in a power factor correction control system, the circuit comprising:

a passive current limiting device; and

a controller, the controller ~~adapted to controlling~~ coupled in controlling relation to:

a power factor correction control circuit and [[;]]

an active current limiting device, wherein the active current limiting device is connectable in parallel with the passive current limiting device.

16. (Original): An active current inrush limiting circuit as in claim 15 wherein the passive current limiting device comprises a resistive component having a positive temperature coefficient.

17. (Original): An active current inrush limiting circuit as in claim 15 wherein the controller comprises an IC3584 IC.

18. (Original): An active current inrush limiting circuit as in claim 15 wherein the active current limiting device comprises at least one insulated gate bipolar transistor (IGBT) circuit.

19. (Original): An active current inrush limiting circuit as in claim 18 wherein the at least one IGBT circuit comprises at least one IGBT gate driver.

20. (Original): An active current inrush limiting circuit as in claim 19 wherein the at least one IGBT gate driver comprises at least one charge pump circuit.

21. (Original): An active current inrush limiting circuit as in claim 19 wherein the at least one IGBT gate driver circuit comprises at least one high voltage driver IC.

22. (Original): An active current inrush limiting circuit as in claim 19 wherein the at least one IGBT gate driver circuit comprises at least one floating power supply.

23. (New): A power supply for controlling inrush current in a power factor correction control circuit, comprising:

means for determining if an inrush current condition exists;

means for passively controlling inrush current with a passive device for a predetermined amount of time, based upon a determination that an inrush current condition does exist;

means for generating a power factor control signal; and

means for implementing the power factor control signal to actively control the inrush current, wherein the means for implementing the power factor control signal to actively control the inrush current comprises means for shunting output current around the passive device and through an active device.

24. (New): The power supply as in claim 23, wherein the means for passively controlling inrush current further comprises means for passing current through a passive device, the passive device resistance having a positive temperature coefficient (PTC).

25. (New): The power supply as in claim 23, wherein the means for generating the power factor control signal further comprises:

means for charging at least one power capacitor to a predetermined voltage level; and

means for enabling at least one integrated circuit associated with the at least one capacitor.

26. (New): The power supply as in claim 25, wherein THE means for enabling further comprises:

means for determining an input current;

means for comparing the input current with a predetermined current level; and

means for disabling the integrated circuit if the input current exceeds the predetermined level.

27. (New): The power supply as in claim 23, wherein the means for shunting current around the passive device and through the active device further comprises means for substantially shunting the output current through an insulated gate bipolar transistor (IGBT).

28. (New): The power supply circuit as in claim 1, wherein the active power factor correction circuit has a supply voltage derived from an input voltage to the power supply circuit and the control output of the controller is separate from the supply voltage.

29. (New): The active current inrush limiting circuit as in claim 15, wherein the power factor correction control circuit has a supply voltage derived from an input to the current inrush limiting circuit and the controller supplies a control output separate from the supply voltage to the active current limiting device in control thereof.